

STATEMENT OF BASIS (AI No. 159002)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0124184 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Archer Daniels Midland Co.
Midstream Loading Operations
P.O. Box 656
Ama, LA 70031

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Yvonne Baker

DATE PREPARED: July 9, 2008

1. PERMIT STATUS

A. Reason For Permit Action:

First time issuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term. Archer Daniels Midland Co. submitted two applications for Midstream Loader "Artco S-1" and Midstream Loader "Artco S-2" however; after review it was determined the midstream loading operations from both vessels can be covered under one permit.

B. NPDES permit – NPDES permit effective date: N/A
NPDES permit expiration date: N/A
EPA has not retained enforcement authority.

C. LPDES permits –
LPDES permit effective date: N/A
LPDES permit expiration date: N/A

D. Date Application Received: June 10, 2008; Additional information received July 9, 2008 via phone conversation.

2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY – derrick crane midstream loading operations

The "Artco S-1" and "Artco S-2" are new midstream loaders that will transfer dry bulk commodities (including whole grains, high moisture commodities, low moisture commodities and dry bulk commodities) from ocean going ships to river barges and from river barges to ocean going ships. The loaders are equipped with cranes for loading and unloading cargo. The "Artco S-1" and "Artco S-2" will operate between River Miles 1.5 and 237 on the Mississippi River, Mississippi River Gulf Outlet, and other connecting commercial water transportation accesses along the Mississippi River in Plaquemines, St. Bernard, Orleans, Jefferson, St. Charles, St. John the Baptist, St. James, Iberville, Ascension, East Baton Rouge and West Baton Rouge Parishes; at Port Manchac on Pass Manchac in Tangipahoa Parish; at the Port of Baton Rouge, River Miles 228.5 and 229.5 on the Intracoastal Waterway in West Baton Rouge Parish; and at the Port of Lake Charles on the Intracoastal Waterway and other connecting

Statement of Basis for
 Archer Daniels Midland Co., Midstream Loading Operations
 LA0124184, AI No. 159002
 Page 2

commercial water transportation accesses in Calcasieu Parish. Stevedoring activities associated with the "Artco S-1" and "Artco S-2" will result in the following types of discharges: equipment/deck washdown, treated sanitary wastewater, and ballast water.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: I*
3. Wastewater Type: III
4. SIC code: 4491

* In Appendix A - Section IV (Relation of 1987 to 1977 Industries) of the Standard Industrial Classification Manual, the SIC code 4491 is equivalent to a previous SIC code of 4463. As per LAC33:IX.1319 Table I, SIC code 4463 is assigned Complexity Type II. The Complexity Type has been BPJ'd from II to I to match other similar facilities.

- C. LOCATION** - Stevedoring operations are conducted between River Miles 1.5 and 237 on the Mississippi River, Mississippi River Gulf Outlet, and other connecting commercial water transportation accesses along the Mississippi River in Plaquemines, St. Bernard, Orleans, Jefferson, St. Charles, St. John the Baptist, St. James, Iberville, Ascension, East Baton Rouge and West Baton Rouge Parishes; at Port Manchac on Pass Manchac in Tangipahoa Parish; at the Port of Baton Rouge, River Miles 228.5 and 229.5 on the Intracoastal Waterway in West Baton Rouge Parish; and at the Port of Lake Charles on the Intracoastal Waterway and other connecting commercial water transportation accesses in Calcasieu Parish.

3. OUTFALL INFORMATION

Outfall *A

Discharge Type: ballast water
 Treatment: none
 Location: at the point of discharge from the barge prior to combining with other waters
 Flow: intermittent
 Discharge Route: Mississippi River, Mississippi River Gulf Outlet and other connecting commercial water transportation accesses along the Mississippi River; Port Manchac on Pass Manchac; the Port of Baton Rouge, River Miles 228.5 and 229.5 on the Intracoastal Waterway; and the Port of Lake Charles on the Intracoastal Waterway and other connecting commercial water transportation accesses in Calcasieu Parish

Outfall *B

Discharge Type: equipment/ deck washdown water when transferring commodities other than coal or coke
 Treatment: none
 Location: at the point of discharge from the barge prior to combining with other waters
 Flow: intermittent
 Discharge Route: Mississippi River, Mississippi River Gulf Outlet and other connecting commercial water transportation accesses along the Mississippi River; Port Manchac on Pass Manchac; the Port of Baton Rouge, River Miles 228.5 and 229.5 on the Intracoastal Waterway; and the Port of Lake Charles on the Intracoastal Waterway and other connecting commercial water transportation accesses in Calcasieu Parish

Statement of Basis for
 Archer Daniels Midland Co., Midstream Loading Operations
 LA0124184, AI No. 159002
 Page 3

Outfall *C

Discharge Type: equipment/ deck washdown water when transferring coal or coke
 Treatment: none
 Location: at the point of discharge from the barge prior to combining with other waters
 Flow: intermittent
 Discharge Route: Mississippi River, Mississippi River Gulf Outlet and other connecting commercial water transportation accesses along the Mississippi River; Port Manchac on Pass Manchac; the Port of Baton Rouge, River Miles 228.5 and 229.5 on the Intracoastal Waterway; and the Port of Lake Charles on the Intracoastal Waterway and other connecting commercial water transportation accesses in Calcasieu Parish

Outfall *D

Discharge Type: treated sanitary wastewater
 Treatment: none
 Location: at the point of discharge from the Marine STP prior to combining with other waters
 Flow: intermittent
 Discharge Route: Mississippi River and other connecting commercial water transportation accesses along the Mississippi River; Port Manchac on Pass Manchac; the Port of Baton Rouge, River Miles 228.5 and 229.5 on the Intracoastal Waterway; and the Port of Lake Charles on the Intracoastal Waterway and other connecting commercial water transportation accesses in Calcasieu Parish

NOTE: Treated sanitary wastewater will not be allowed to discharge to the Mississippi River Gulf Outlet Canal.

* The numbering convention for each barge is listed in Attachment 2 of the permit. For this permit, the different wastestreams are referred to as A, B, C, or D, and the different barges will be designated as 01, 02, etc. (see Attachment 2).

4. RECEIVING WATERS

STREAM - Mississippi River, Mississippi River Gulf Outlet and other connecting commercial water transportation accesses along the Mississippi River; Port Manchac on Pass Manchac; the Port of Baton Rouge, River Miles 228.5 and 229.5 on the Intracoastal Waterway; and the Port of Lake Charles on the Intracoastal Waterway and other connecting commercial water transportation accesses in Calcasieu Parish

BASIN AND SEGMENT - Any basin and subsegment located within the Mississippi River, Mississippi River Gulf Outlet and other connecting commercial water transportation accesses along the Mississippi River; Port Manchac on Pass Manchac; the Port of Baton Rouge, River Miles 228.5 and 229.5 on the Intracoastal Waterway; and the Port of Lake Charles on the Intracoastal Waterway and other connecting commercial water transportation accesses in Calcasieu Parish

Statement of Basis for
Archer Daniels Midland Co., Midstream Loading Operations
LA0124184, AI No. 159002
Page 4

DESIGNATED USES - Possible designated uses of receiving streams:

- a. primary contact recreation
- b. secondary contact recreation
- c. propagation of fish and wildlife
- d. drinking water supply (Mississippi River; Intracoastal Waterway – From Port Allen Locks to Bayou Sorrel Locks)
- e. oyster propagation (Mississippi River Gulf Outlet)

5. TMDL STATUS

Outfalls (*A); ballast water and (*B) and (*C); equipment/deck washdown water and (*D); treated sanitary wastewater

These discharges are made directly into the Mississippi River, Mississippi River Gulf Outlet and other connecting commercial water transportation accesses along the Mississippi River; Port Manchac on Pass Manchac; the Port of Baton Rouge, River Miles 228.5 and 229.5 on the Intracoastal Waterway; and the Port of Lake Charles on the Intracoastal Waterway and other connecting commercial water transportation accesses in Calcasieu Parish (Note: The treated sanitary wastewater will not be allowed to discharge to the Mississippi River Gulf Outlet).

Ballast water is not suspected to cause or contribute to impairments of the receiving streams since the ballast water is the river water without any additives. Also, the discharges of dry commodity barge washwaters from derrick crane barges are of relatively small volumes and would not be suspected to contribute to any of the listed impairments since the barges will be swept prior to the use of the river water for washing the barges. The treated sanitary wastewater is subject to pollutants associated with fecal coliform (pathogen indicators), organic enrichment/ low dissolved oxygen and associated parameters (nitrogen, phosphorus, nutrients, and ammonia). Since the volume of the effluent is relatively low and the discharge is regulated in accordance with LAC 33:IX.711 or 709.B, it is expected that water quality will be maintained. Therefore, the parameters and limits, as well as the BMPs, contained in the draft permit will offer adequate protection to any streams listed on the LDEQ Section 303(d) List of Impaired Waterbodies.

A reopener clause will be established in the permit to include more stringent limits based on final loading allocations in a completed and approved TMDL.

6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

7. COMPLIANCE HISTORY/COMMENTS

1. OEC – There are no open, appealed, or pending OEC enforcement actions as of July 14, 2008.
2. DMR Review/Excursions – There are no DMRs on file. This is an initial permit.

Statement of Basis for
Archer Daniels Midland Co., Midstream Loading Operations
LA0124184, AI No. 159002
Page 5

8. ENDANGERED SPECIES

The receiving waterbodies, various subsegments, have the potential to have been identified by the U. S. Fish and Wildlife Service (FWS) as habitat for certain species, which are listed as endangered species. LDEQ has not submitted this draft permit to the FWS for review in accordance with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and based on information provided by the FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. Effluent limitations and Best Management Practices are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

9. HISTORIC SITES

The discharge is from a proposed facility, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

10. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

11. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

Statement of Basis for
 Archer Daniels Midland Co., Midstream Loaders
 LA0124184, AI No. 159002
 Page 6

Rationale for Archer Daniels Midland Co.

1. Outfall *A – the intermittent discharge of ballast water

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg: Daily Max (mg/l)	<u>Reference</u>
Flow (gpd)	Report: Report:	(*1), (*2)
COD	---: 250	(*1)
Oil & Grease	---: 15	(*1)
pH	6.0 : 9.0	(*1), (*3)
standard units	(min): (max)	

Treatment: none

Monitoring Frequency: Once per discharge event (may be discharged without sampling provided there is no visible sheen; flow and the presence or absence of a sheen shall be recorded for all discharges) - based on BPJ per LDEQ's current practices for permitting ballast water discharges and existing permits for similar outfalls.

Testing for COD, Oil & Grease, and pH is only required if a visible oil sheen is present. If a visual inspection can be conducted, the compartment containing the ballast water must be inspected for a visible sheen prior to the discharge event. If a visible oil sheen is observed in the compartment containing the ballast water prior to the discharge event or if an oil sheen is observed during the discharge event, testing for COD, Oil & Grease, and pH is required.

Limits Justification: The effluent limitations are based on BPJ per LDEQ's current practices for permitting ballast water discharges, LAC 33:IX.2707.1.1.b, and LAC 33:IX.1113C.1 and existing permits for similar outfalls.

(*1) LDEQ's current practices for permitting ballast water discharges

(*2) LAC 33:IX.2707.1.1.b

(*3) LAC 33:IX.1113.C.1

Statement of Basis for
 Archer Daniels Midland Co., Midstream Loaders
 LA0124184, AI No. 159002
 Page 7

2. **Outfall *B** - the intermittent discharge of equipment/deck washdown when transferring commodities other than coal or coke

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg: Daily Max (mg/l)	<u>Reference</u>
	No Limits	BPJ; existing permits for similar outfalls

Treatment: none

Monitoring Frequency: None (BPJ; existing permits for similar outfalls)

Limits Justification: BPJ; language has been included in Part II which addresses pollution prevention practices for the washdown activity; this is consistent with existing permits for similar outfalls.

3. **Outfall *C** - the intermittent discharge of equipment/deck washdown when transferring coal or coke

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg: Daily Max (mg/l)	<u>Reference</u>
Flow (gpd)	Report: Report	(*1)
COD	250: 400	(*1)
TSS	Report: Report	(*1)
pH	6.0 : 9.0	(*1)
standard units	(min): (max)	

Treatment: none

Monitoring Frequency: once per discharge event for all parameters (BPJ; existing permits for similar outfalls)

Limits Justification: Limits are based on LDEQ Office practices for permitting coal and/or coke barge washwater.

(*1) LDEQ Office practices for permitting coal and/or coke barge washwater

Statement of Basis for
 Archer Daniels Midland Co., Midstream Loaders
 LA0124184, AI No. 159002
 Page 8

4. **Outfall *D** - the intermittent discharge of treated sanitary wastewater

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg: Weekly Avg (mg/l)	<u>Reference</u>
Flow (gpd)	Report: Report	BPJ; LAG480000 and similar discharges
BOD ₅	---: 45	BPJ; LAG480000 and similar discharges
TSS	---: 45	BPJ; LAG480000 and similar discharges
Fecal Coliform Colonies/100ml	---:400 (Daily Max)	BPJ; LAG480000 and similar discharges
pH	6.0 : 9.0	BPJ; LAG480000 and similar discharges
standard units	(min): (max)	

Treatment: Marine Sanitation System with chlorination

Monitoring Frequency: once per 6 months for all parameters (BPJ; as per the Light Commercial General Permit (LAG480000), Schedule A, Treated Sanitary Wastewater less than 5000 GPD and similar discharges).

Limits Justification: BPJ; per the Light Commercial General Permit (LAG480000), Schedule A, Treated Sanitary Wastewater less than 5000 GPD and similar discharges. **Note: The fecal coliform limit for treated sanitary wastewater discharges to subsegments with oyster propagation designated uses (43 colonies/100ml) was not used because the facility will not discharge this wastewater to the Mississippi River Gulf Outlet.**

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

This facility is not subject to Effluent Limitations Guidelines for Transportation Equipment Cleaning, 40 CFR Part 442, because, in accordance with 40 CFR 442.1.a, "this part applies to discharges resulting from cleaning the interior of tanks used to transport chemical, petroleum or food grade cargos." This facility does not clean the interior of tanks. Only top deck washing of floating derrick crane barges is performed.

Storm Water Pollution Prevention Plan (SWP3) Requirement

As per LAC33:IX.2341.B.14.k, stormwater discharges from facilities classified as SIC Codes 4491 are considered to be associated with industrial activities and accordingly require SWP3 requirements. However, an SWP3 is not included in the permit because the facility is a water related operation only. Barge BMPs are comparable to the SWP3 requirements; therefore, the barge BMPs will be applied instead.